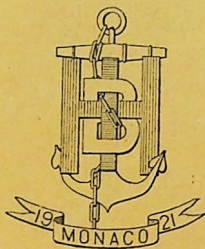


INTERNATIONAL HYDROGRAPHIC BUREAU

FOURTH INTERNATIONAL
HYDROGRAPHIC CONFERENCE 1937



REPORT
on the Work done

BY THE
INTERNATIONAL HYDROGRAPHIC BUREAU
since the Third International Hydrographic Conference
(Monaco 1932)

FROM APRIL 1932
to 1st SEPTEMBER 1936



MONACO
—
SEPTEMBER 1936

FOURTH INTERNATIONAL
HYDROGRAPHIC CONFERENCE, MONACO, 1937

by the

since the Third International Hydrographic Conference
(Monaco 1932)

The present report on the Work carried out and undertaken by the International Hydrographic Bureau since the last Conference, is published in accordance with the requirements of Article 55 (a) of the Statutes.

References to the various publications of the Bureau are inserted for each article.

MONACO, September 1936.

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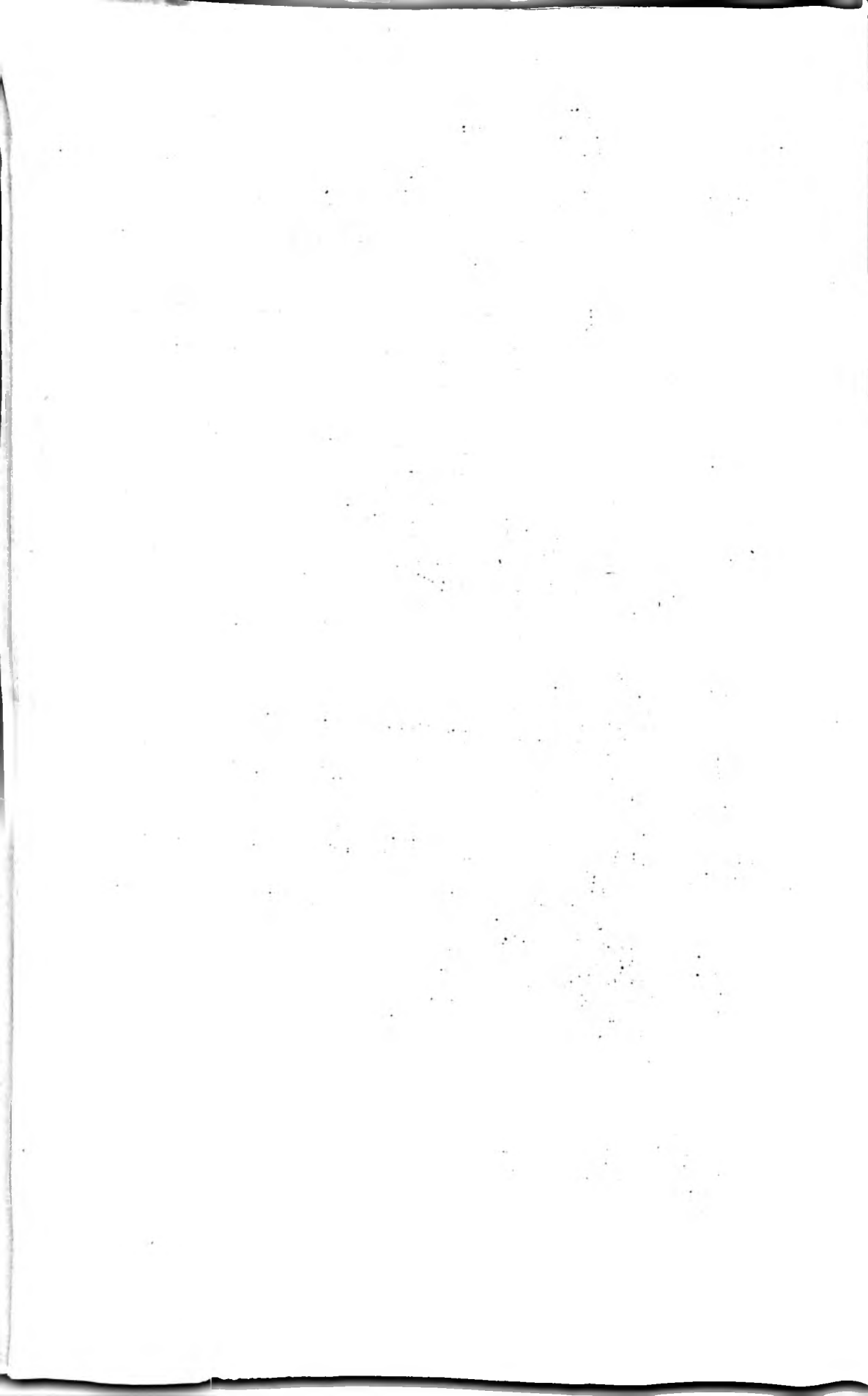
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I. C H A R T S

1. Conventional Symbols and Abbreviations (Special Publication N°22) -----

After inquiry addressed to the Hydrographic Offices by Circular-Letter N°8-H 1933, the Bureau issued in March 1936 a New (revised) Edition of Special Publication N°22 - MANUAL OF SYMBOIS AND ABBREVIATIONS. In drawing up this Manual, special attention was given to indicating the progress realised in the adoption of international symbols.

2. Indication on charts of the areas examined by sweeping apparatus. -----

After inquiry on this question by Circular-Letter N°5-H 1932, certain proposals were drafted by the Bureau and published in International Hydrographic Bulletin N°7, July 1933.

See also: International Hydrographic Bulletin 1932, pages 194, 209, 230, 249). Circular-Letter N°6-H 1933 requested States Members to communicate to the Bureau their views concerning those proposals.

The result of inquiry will appear in Hydrographic Review for November 1936, and new proposals set forth to the next Conference.

3. Catalogue of Original Charts. -----

In May 1935 the Bureau issued a Third Part of the Catalogue of Original Charts, Special Publication N°25 b (Pacific Ocean). This volume completes the series of the publication for the whole World with the exception of the Arctic and Antarctic Seas, Lakes and Navigable Rivers.

Correction supplements in connection with Special Publications Nos 25 and 25 a were published in May and July 1933.

4. List of Sales Agencies . -----

While preparing Part III of the Catalogue of Original Charts, the Bureau at the same time revised and brought up to date the General List of Sales Agencies of hydrographic charts and documents published by the various Hydrographic Offices.

In the course of this revision a list of the ports in which the sale of the nautical documents published by the various Hydrographic Offices is more or less centralized, was drawn up in manuscript only.

5. Progress of Coastal Surveys. -----

The Bureau has continued the study of the progress of Coastal Surveys, making use of the charts at its disposal and, as a general rule, basing its examination on the information supplied by the Catalogue of Original Charts.

The Bureau has undertaken the construction of a series of Index-Charts showing the progress of coastal hydrography. No special publication has been issued in this connection, the collection being simply kept up at the Bureau in conformity with Resolution, Charts N°23 of 1932.

6. Natural Scale of Charts.

In International Hydrographic Bulletin N°II, 1935, page 42, the International Hydrographic Bureau requested information with reference to the practical rules adopted by the different Hydrographic Offices for determining the Natural Scale of their charts. A few replies have reached the Bureau.

(See: International Hydrographic Bulletin N°IV, 1935, page 77).

7. E.D., P.D., P.A. Dangers

(Special Publication N°20)

Information concerning the North Pacific Ocean and the South Pacific Ocean (Part D and Part E of Special Publication N°20) was published in 1933. In 1935 the Bureau carried out a complete revision of the Five Parts of this publication for the whole world, using for this purpose the most recent Notices to Mariners and Sailing Directions; lack of funds has, however, rendered it necessary for the present to postpone the issue of this New Edition.

8. Use of the Terms "Publication", "New Edition", "Reprint", etc.

To comply with the instructions of the 1932 Conference, a Report concerning the use of these terms was published in International Hydrographic Bulletin N°II, 1934, page 19. As a result of this publication, a few Offices have communicated their procedure and the equivalent terms of which they make use in this connection. Up till now, however, replies received have not been sufficient in number to enable the Bureau to draw up a small vocabulary of these equivalent terms and of their exact definitions.

(See: International Hydrographic Bulletin, 1935, N°IV, page 77.

" " " " N° V, " 103.

9. Geographical Positions.

(Special Publication N°24)

In conformity with the decision of 1932 Conference the Bureau has discontinued the complete publication of lists of Geographical Positions; work in this connection has been limited to keeping Special Publication N°24 up to date by inserting new information reaching the Bureau, in the International Hydrographic Bulletin.

(See: International Hydrographic Bulletin, 1932, N°VII, page 177

"	"	"	1934, N° II,	"	27
"	"	"	1934, N° IV,	"	84
"	"	"	1935, N° II,	"	37
"	"	"	1935, N° IV,	"	79
"	"	"	1936, N° I,	"	5
"	"	"	1936, N° II,	"	24

10. Centralisation of Oceanic Soundings.

The Bureau has endeavoured to continue the centralisation of oceanic soundings and especially all oceanic soundings obtained by echo. (Circular-Letter N°7-H 1932).

The Bureau keeps up to date a repertory of the series of soundings which reach it and a Memorandum of the principal scientific expeditions, likely to record oceanic soundings.

For the purpose of procuring these soundings, a form of record has been drawn up by the Bureau and is available for such Offices as may desire to communicate soundings taken outside the continental shelf (Form presented to the Oceanographic Congress held at Malaga-Madrid in 1935 - Circular-Letter N°2-M 1935). Copies of this Record Form have been sent to Hydrographic Offices which have requested same.

In certain particular cases, the Bureau has taken measures which will enable it to communicate in economical form new soundings which it receives to Offices which request same.

At date of writing the Bureau possesses a total of 950 Plotting Sheets prepared for the record of oceanic soundings, scale 1: 1 000 000 at the Equator, Mercator projection. All depths published by the Offices in the form of lists of oceanic soundings have been plotted on 724 of these plotting sheets. All oceanic soundings received are plotted immediately after receipt at the Bureau.

The total number of oceanic soundings plotted to date (September 1936) is approximately 173,300.

11. General Bathymetric Chart of the Oceans.

Extracts from the above plotting sheets have been made on tracing paper with a view to the construction of the New Edition of the General Bathymetric Chart of the Oceans.

Important donations granted to the International Hydrographic Bureau during 1934, 1935 and 1936 have made it possible to accelerate this work by the employment of an additional Temporary Draughtsman.

Sheet A₁ - North Atlantic Ocean - appeared in April 1935; Sheet A₁ - South Atlantic Ocean - appeared in May 1936.

Parts A₁ and A₁ of a series of pamphlets published by the International Hydrographic Bureau, give details concerning the preparation of this Third Edition of the General Bathymetric Chart of the Oceans and some statistical information.

Sheet B₁ - Northern Atlantic - is being engraved.

Sheets A_{IV} and A_{IV} - North and South Indian Ocean - are in hand.

12. General Basic Chart for Air Navigation.

The stones of the General Bathymetric Chart of the Oceans have been lent to the International Committee on Air Navigation for the construction of the General Basic Air-Map published by this Committee.

The Bureau has corresponded with this Committee with reference to the study of certain conventional symbols common to charts and air-maps.

13. Magnetic Charts.

The International Hydrographic Bureau has mentioned in the Bulletin Magnetic Charts published by Hydrographic Offices.

(See: International Hydrographic Bulletin, 1935, N°II, page 43
" " " 1935, N°IV, " 94

14. New Charts

Statistics of Charts received at the Bureau :-

Year	New Charts	New Editions	Total
1932	103	514	617
1933	89	542	631
1934	107	425	532
1935	130	480	610
1936 (1st August)	74	299	373

States Members have supplied to the International Hydrographic Bureau a number of charts necessary for the revision of the General Bathymetric Chart of the Oceans.

15. Transcription of Place Names.

The Bureau has continued to follow this question.

(See: Hydrographic Review, Vol. IX, N°2, 1932, page 76

" International Hydrographic Bulletin, 1933, N°IV, page 79.).

II.- SAILING DIRECTIONS, NAUTICAL DOCUMENTS etc.

16. General Repertory of Sailing Directions, Light Lists, Notices to Mariners, Tide Tables, Catalogues of Charts and Official documents, published and sold by the Hydrographic Offices of the different States.
(Special Publication N°27).

The Bureau arranged for the correction of this publication to 31st December 1934. (Circular-N° 3, International Hydrographic Bulletin, 1933, N°X, page 182). Lack of funds, however, has caused this work to be momentarily suspended in favour of more urgent publications.

17. Light Lists - Power of Lights.

In order to obtain a précise definition of the International Candle, the Bureau was led to correspond with the Bureau International des Poids et Mesures. The reply of the latter was published in International Hydrographic Bulletin 1932, N°IX, page 213, and N°X, page 233.

18. Tables of Distances between Ports.

A study of the Tables of Distances between Ports was published in Hydrographic Review, Vol.X,N°1, May 1933, page 88.

A list of the connecting points used in these Distance Tables is given on page 101 of the above-mentioned Review.

19. List of W/T Signals.

I.H.B. Circular-Letter N°6-H 1935 inaugurated the study of a standard arrangement of lists of W/T Signals published by the various States. Supplements A,B,C,D and E to this Circular-Letter communicated the opinions and observations of States Members, of the Bureau International de l'Union Télégraphique, Berne, and of the International Meteorological Committee.

Adopting as basis the suggestions received, the Bureau has established a comprehensive scheme for the standardisation of these Lists, which is submitted to the present Conference.

(See: Proposals submitted to the Conference).

20. List of Life-Saving and Refuge Stations
(Special Publication N° 18)

Replies received to Circular-Letter N°3-H 1935 have enabled the Bureau to publish a Third Edition (December 1935) of Special Publication N° 18.

For this Third Edition the Bureau endeavoured to put into practice an economical method of production,

21. Limits of Oceans and Seas.
(Object:- Geographical distribution and
division of volumes of Sailing Directions,
Notices to Mariners etc.).

By Circular-Letter N°4-H 1933 the Bureau communicated proposed revised limits for the Southern Ocean and adjoining Seas, for the Northern limit of the North Sea and the Southern and Eastern limits of the Norwegian and Greenland Seas.

The suggestions offered by Members have been considered with regard to the proposed Limits of Oceans and Seas submitted to the present Conference.

(See: Proposals submitted to the Conference).

An article indicating the limits selected in U.S.S.R. for the Arctic Seas was published in Hydrographic Review, Vol.XIII,N°1, May 1936, page 160.



22. Vocabulary concerning Fog Signals.
(Special Publication N°29)

The Bureau has drawn up a small French-English vocabulary of Fog Signals (Special Publication N°29, November 1933).

With the help of the various States, the Bureau hopes to collect the equivalent terms in the language of each country.

23. Terminology of Sea Ice.

The International Hydrographic Bureau has corresponded with the Special Committee of the Terminology of Sea Ice in connection with the assembly of the Meteorological Committee held at Warsaw in September 1935, it being the intention of the Bureau to prepare a code for the designation of ice forms.

24. Oceanographic Vocabulary.

The International Hydrographic Bureau has collaborated with the Oceanographic Institute of Venice in correcting a small lexicon which gives in several languages the principal terms used in Oceanography.

25. New Nautical Documents.

New nautical documents received by the Bureau are mentioned in the International Hydrographic Bulletin and reviews of the most important amongst them are also published.

At the request of a State Member a list of countries publishing Nautical Almanacs was given in International Hydrographic Bulletin N°III, 1935, page 64.

III - NOTICES TO MARINERS.

26. Standard Form of arrangement of Notices.

Having studied a standard form of arrangement of Notices to Mariners, the Bureau formulated a proposal which appeared in International Hydrographic Bulletin N°I, 1934, page 7.

Hydrographic Review Vol.XII,N°1, May 1935, page 8, gives the replies sent by States Members.

(See: Proposals submitted to the Conference).

27. Centralisation of Notices to Mariners in Foreign Ports.

A review of the replies to the inquiry opened by Circular-Letter N°5-H 1931, and new recommendations by the Bureau with the object of increasing the efficacy of the Centralisation of Notices, were published in Circular-Letter N°9-H 1933.

New Centralisation ports and the Notices kept there for consultation have been announced in supplements to the latter above-mentioned Circular-Letter.

Recapitulatory lists have been published in the International Hydrographic Bulletin, notably in that of July-August 1935, page 79, and that of November-December 1935, page 111. The latter Bulletin explains the method of operation of the Centralisation Service for the beginning of the year 1936.

Corrections and additions have been announced in the Bulletin during 1936 the number of centralising ports were augmented considerably during this year.

(See: also Proposals submitted to the Conference).

28. Urgent Notices by Wireless Telegraphy and the
New International Code of Signals.

After receipt of the New International Code of Signals, 1931 Edition, the International Hydrographic Bureau studied how to bring into harmony with the arrangements of this new code, the tabulation of Urgent Notices to Mariners by W/T which was submitted for examination by States Members in Hydrographic Bulletin N° III, March, 1929. Details will be published in the Hydrographic Review for November 1936.

IV - T I D E S.

29. List of Harmonic Constants.
(Special Publication N°26)

This Publication was completed to date of 31.XII.1933 by the issue of 328 supplementary sheets, a new Geographical Index and an Addendum.

A new series of 75 Sheets to date of 30.VI.1936 and Addendum N°4 bringing the publication up to date by including all information received at the Bureau as a result of the inquiry effected by Circular-Letter N°8-H 1935 is in hand.

30. Tidal Authorities.
General Repertory of Tidal Records.
(Special Publication N°31)

The publication of information relating to this subject was continued in Hydrographic Review, Vol.IX, N°1 & 2, 1932, Vol.X, N°1, 1933, Vol.XI, N°1, 1934, Vol.XII, N°2, 1935 and Vol.XIII, N°1, 1936.

30. (continued)

A New Edition of this publication, revised in 1934 and containing complementary information on mean sea level observations, has been published by the Bureau, taking into account the inquiries carried out by means of Circular-Letters 4-H, 5-H and 9-H of 1934.- Special Publication N°31, December 1935.

31. Vocabulary concerning Tides.
(Special Publication N°28 a).

An edition of this vocabulary in German, Dutch, and Spanish was published in October, 1934.

32. Collection and Publication of Information
concerning Tidal Currents.

A summary of replies to Circular-Letter N°2-H 1933 was published in Hydrographic Review Vol.XI, N°2, November 1934, page 97.

33. Study of Mean Sea Level.

In connection with this question the Bureau has collaborated with the International Association of Physical Oceanography. The results of monthly and yearly Means sent to the Bureau in reply to Circular-Letters Nos 5-H and 9-H of 1934 were forwarded to this Association for possible publication. Some data concerning the publication of the computations were incorporated in the New Edition of the General Repertory of Tidal Records. (Special Publication N°31) - (See above).

34. Extension of World Network of
Tide-gauge Stations.

The International Hydrographic Bureau has plotted on charts the locations of the different Tide-gauge Stations given in the General Repertory of Tidal Records (See: N°30 above).

This work combined with the study of Mean Sea Level mentioned in paragraph 33 above, can be used in concert with the representatives of the International Association of Physical Oceanography (Committee on Tides) for the selection of appropriate locations where it may have proved evident that the determination of the tidal regime would be useful.

These data have been prepared in view of the Congress of Geodesy and Geophysics held at Edinburgh in September 1936.

V - METHODS AND INSTRUMENTS

35. General Soundings.

A study of the methods used in various States for sounding from ships and boats was begun by means of Circular-Letter N°5-H 1933. This letter also requested information as to systems used for reducing soundings to chart datum and methods of running lines of soundings.

Results of the inquiry were published in Hydrographic Review, Vol. XI, N°1, May 1934, page 36.

36. Methods of Sweeping.

An article concerning Methods of Sweeping in various countries appeared in Hydrographic Review, Vol. XI, N°1, May 1934, page 67.

(Permanent Inquiry inaugurated by Circular-Letter N° 33-H 1926).

37. Echo Sounding.

Descriptive articles concerning Echo Sounding Machines and Methods for reducing Echo Soundings appeared in several volumes of the Hydrographic Review, it is to be particularly noted that Part XIII of this study contained in Hydrographic Review Vol. XI, N°2, November 1934, page 25, is followed by a recapitulatory bibliography of all the articles dealing with Echo Sounding published by the Bureau since 1923 in both the Hydrographic Review and the International Hydrographic Bulletin.

The Bureau has endeavoured to reproduce or to summarize in the Hydrographic Review several studies on the velocity of sound in sea water and the correction for slope of echo soundings.

38. Insertion on Charts of Echo Soundings
& Calibration of Sounding Machines.
Plotting and Publication of Echo Soundings.

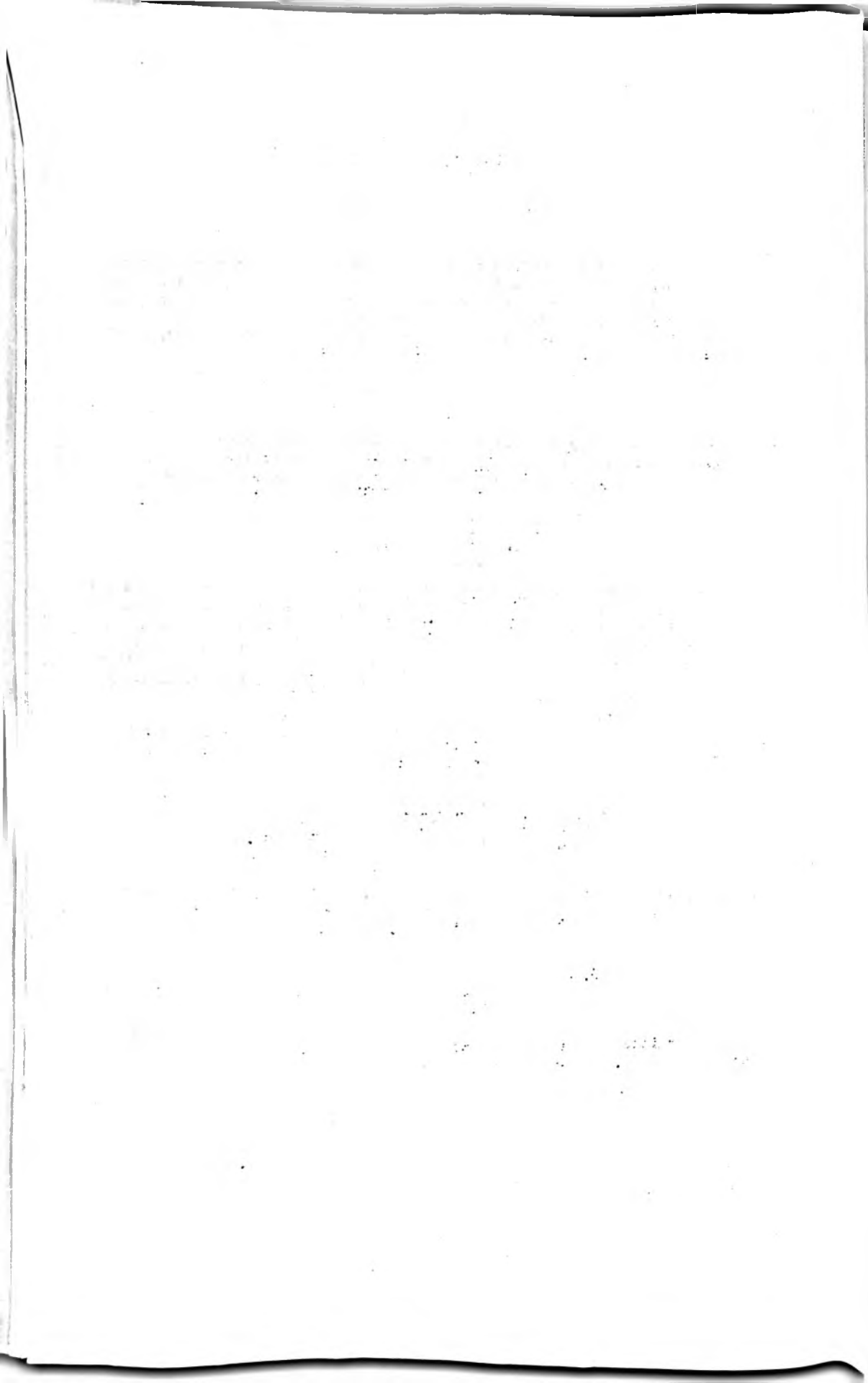
An inquiry on these subjects was undertaken by means of Circular-Letters Nos 3-H and 8-H of 1934 and results will probably appear in a future publication.

39. Measurement of Depth by means of
Protected and unprotected thermometers.

An article on this subject was published in Hydrographic Review Vol. X, Nos 1 and 2, pp. 126 and 28.

40. Sound Ranging - Phonotelemetry.

The Bureau has continued to publish in the Hydrographic Review extracts from articles concerning this question. (Vol. IX, N°2, p. 71, 238).



41. Use of Aircraft for Surveying.

Complementary information on this question has been published in the Hydrographic Review (Vol.XII, N°1, p. 13 - XII, N°2 p. 128).

42. Hydrographic Instruments.

Descriptions of hydrographic instruments are frequently given in the Hydrographic Review (Sextants, Theodolites, various Sounders, Fish-lead, Logs, Current meters, Tide-gauges, Thermographs, etc.)- For detailed enumeration see Chapter XIV of the Recapitulatory Table of the first 24 volumes of the Hydrographic Review - November 1935.

43. Exhibition of Instruments at the
International Hydrographic Bureau.

By Circular-Letter N°1-H 1935 the Bureau invited the instrument-makers of the States Members to take part in a permanent Exhibition of Instruments accessible to visitors in the library of the International Hydrographic Bureau.

A large number of instruments have already been received in response to this invitation.

(See: International Hydrographic Bulletin 1935, N°1, page 1.

"	"	"	" N°IV "	97.
"	"	"	" N°VI, "	119.

44. Triangulation.

Articles on the compensation of polygons and quadrilaterals were published in the Hydrographic Review, Vol.IX, N°2, November 1932.

45. Methods of Engraving and Printing Charts.

The series of articles on this subject was continued in Hydrographic Review Vol.IX; Nos 1 & 2, pp. 139 & 132.

46. Practical Hints to Hydrographic Surveyors.

A series of articles containing practical hints to Hydrographic Surveyors was begun in Hydrographic Review Vol.IX, N°2.

47. Great Circle Navigation and Use of
Radiogoniometric Bearings.

Studies on this question were published in Hydrographic Review Vol.X, N°2, November 1933, and Vol.XII, N°2, November 1935.

VI. WORK AND ORGANISATION OF HYDROGRAPHIC OFFICES etc.

48. Definition of the words "Hydrographer" and
" Hydrography".

Replies to Circular-Letter N°1-H 1933 were published in Hydrographic Review Vol.XI,N°1,May 1934, page 8, with proposed definitions of these terms. These are to be submitted to next Conference.

49. Organisation of Offices - Year-Book.

Articles on the organisation of several Hydrographic Offices were published in the Hydrographic Review (Vol.XI, Nos 1 & 2, pp. 20 & 12).

A Year-Book of the Hydrographic Offices has been published each year by the Bureau.

The Bureau has endeavoured to keep in touch with the official organisations of States non-Members which deal with hydrographic questions.

50. Hydrographic Surveying Vessels and Boats.

Descriptions and detailed plans have been given in several volumes of the Hydrographic Review. (Vols.IX,N°1, X, N°2; XI. Nos 1 & 2).

51. Work carried out and projected by Offices
(Article 12 of the Statutes)

The Bureau has continued, through the medium of the International Hydrographic Bulletin, to inform States Members of Hydrographic Work carried out and projected by the various national Offices.

The Bureau has proposed the adoption of a standard form of report.
(See: International Hydrographic Bulletin 1933, N°X, p. 178).

Reports on surveys carried out, with historical notes, were published in the Hydrographic Review.

52. Hydrographic, Oceanographic and Scientific Expeditions
and Missions.

Expeditions or Missions likely to interest the Hydrographic Offices have been reported in the International Hydrographic Bulletin and more detailed accounts of them have appeared in the Hydrographic Review.

The Bureau has also kept in touch with international institutions and assemblies dealing with subjects allied to hydrography.

The Bureau sent a representative in an advisory capacity to the 20th Assembly of the I.C.A.N. at Paris, May, 1932, in connection with the question of symbols for air-maps.

(See; International Hydrographic Bulletin, 1932, N°VI, p.142).

The

52. (continued)

The Bureau was represented at Malaga at the First Ibero-American Conference held in April 1935.

(See: Hydrographic Review, Vol. XII, N°2, November 1935, page 12).

The Bureau was also represented at the Meeting of the International Association of Physical Oceanography at Edinburgh in September 1936.

53. Hydrographic Bibliography.

The Bureau has continued to insert in the Hydrographic Review, bibliographical lists, reviews of and extracts from articles or books of interest to hydrography.

54. Requests for Information from Offices.
(Article 15 of the Statutes)

The International Hydrographic Bureau has acted as intermediary in requesting and forwarding information. When such information might be of interest to other Members, it has been mentioned in the International Hydrographic Bulletin.

55. Requests for records of new oceanic soundings.

To comply with a recommendation expressed at the Third International Hydrographic Conference, the Bureau, by Bulletin Circular, December 1932, p. 272, directed the attention of Hydrographic Offices to the desirability of obtaining new soundings in the South Pacific Ocean.

VII. MISCELLANEOUS RESEARCHES AND QUESTIONS.

56. Unification of Buoyage.

The International Hydrographic Bureau has kept itself informed of the action taken in this connection by the Section of Communications and Transit of the League of Nations.

Articles on this question have appeared in the International Hydrographic Bulletin and the Hydrographic Review.

(See: International Hydrographic Bulletin, N°IX, 1932, p. 210

"	"	"	N° I, 1933, p. 15
Hydrographic Review,	Vol. IX, N°1,	1932,	p. 192
"	"	Vol. X, N°1,	1933, p. 184
"	"	Vol. XI, N°2,	1934, p. 123
"	"	Vol. XIII, N°1,	1936, p. 163).

VIII. INTERNATIONAL HYDROGRAPHIC BUREAU.

57. Resolutions of the Third International Hydrographic Conference.

The resolutions adopted by the Third International Hydrographic Conference were published in International Hydrographic Bulletin N°V, May 1932.

Printed copies of the Report of Proceedings of the Conference were completed and distributed to States Members in December 1932.

The Directing Committee has undertaken research work and inquiries as required by the Resolutions of the Third International Hydrographic Conference.

For reasons of economy a list of the permanent inquiries and general questions studied by the Bureau has not been published in the International Hydrographic Bulletin from January 1934 onwards.

58. Statutes of the International Hydrographic Bureau.
Article 22 (II)

The results of the vote concerning amendments to Article 22 (II) of the Statutes, requested in accordance with the decisions of the Conference by Circular-Letter N°8-R of 1932, were published in Circular-Letter N°5-R of 1933.

(See: International Hydrographic Bulletin N°IX, 1933, p. 155).

59. Article 55.

Results of the vote concerning amendments to Article 55 of the Statutes, requested by Circular-Letter N°9-R of 1932, were published in Circular-Letter N°6-R of 1933.

(See: International Hydrographic Bulletin N°IX, 1933, p. 156).

60. Amendments to 1926 Statutes.

Circular-Letter N°5-R of 1932 contained the Directing Committee's corrections to the volume of Statutes necessitated by the Resolutions of the 1932 Conference.

61. Internal Organisation of the I.H.B.

By Circular-Letter N°4-R of 1932 the Directing Committee requested the opinions of States Members concerning certain changes in the internal organisation of the International Hydrographic Bureau. Opinions of States Members were published in the form of Supplements (A to J) to this Circular-Letter.

62. Report on possible Reductions in
the expenditure of the I.H.B.

Circular-Letters Nos 1-R, 3-R and Supplements, Nos 8-R, 11-R and 14-R of 1933 contained the Directing Committee's report on this question.

IX. MISCELLANEOUS PUBLICATIONS OF THE INTERNATIONAL
HYDROGRAPHIC BUREAU.

63. Economical production of publications.

Circular-Letter N°4-H of 1932 requested information from States Members as to processes which might insure the economical production of I.H.B. publications of which only a restricted number of copies is required or which are of a temporary nature.

A summary of this inquiry appeared in International Hydrographic Bulletin N°1, January 1933, page 3.

64. Distribution of Publications.

By Circular-Letter N°3-H of 1934, the Bureau brought under consideration a new method of distribution of International Hydrographic Bureau publications for the purpose of assuring a wider distribution among official institutions dealing with maritime questions.

This new method of distribution was adopted in 1935.

(See: International Hydrographic Bulletin, N°V, 1934, page 88).

A new scheme will be proposed to next Conference. (See: Proposals).

65. Hydrographic Review.

During the period 1932-1936, the Bureau has issued each year two numbers of the Hydrographic Review.

The Bureau has endeavoured to obtain the lowest possible printing prices consistent with the standing of the Review, which standing it has endeavoured to maintain.

The Bureau has tried to obtain the collaboration of a greater number of contributors of articles for the Hydrographic Review.

In November 1935, on the publication of the Twenty-fourth number of the Hydrographic Review, a recapitulatory analytical Table of the articles which had appeared in the Review since its first issue was drawn up, with a Table arranged by names of authors. This Table can be had as a separate reprint.

66. International Hydrographic Bulletin.

The Bureau has continued the issue of the International Hydrographic Bulletin, in which the majority of the Circular-Letters and information of an urgent or temporary nature have been inserted.

During 1932 and 1933 the Bulletin appeared monthly. From the year 1934, in consequence of reduced expenditure, the Bulletin is now published every two months.

The last number for each year contains a systematic Table of Contents for the year.

67. Special Publications.

During the five-year period 1932-1936, the International Hydrographic Bureau has issued the following Special Publications:-
Text and Translation of the Legends of the original Chart of the World published in 1569 by Gerhard Mercator.

Special Publication N°20: Doubtful Shoals, Part D, North Pacific Ocean,
January 1933.

" " " " " ,Part E, South Pacific Ocean,
July 1933.

Special Publication N°29: Vocabulary concerning Fog Signals,
November 1933.

Special Publication N°26: ~~List~~ of Harmonic Constants, December 1933
Edition.

Special Publication N°28a: Vocabulary concerning Tides (in German,
Dutch and Spanish), October 1934.

Special Publication N°25b: Catalogue of Original Charts - Part III
(Pacific Ocean), May 1935.

Special Publication N°30: Part A₁ - General Bathymetric Chart of the
Oceans. Information concerning the preparation of the Third Edition
of Sheet A₁ (North Atlantic Ocean), May 1935.

" " " Part A₁ - (South Atlantic Ocean), March 1936.

Special Publication N° 31: General List of Tidal Authorities and
Tidal Records, December 1935.

Special Publication N° 18: List of Life-Saving Stations, 3rd. Edition,
December 1935.

Special Publication N° 22: Manual of Conventional Signs and Glossary
of nautical terms and abbreviations used on the most recent charts of
various States, March 1936.

It is desirable that some concordant arrangement be adopted for keeping up to date certain documents published by the International Hydrographic Bureau, the periodicity, being fixed for instance, at 5 or 10 year intervals approximately according to the object of the publications.

69. Charts.

C-3 - General Bathymetric Chart of the Oceans, Sheet A - North Atlantic Ocean -¹ April 1935.

" " " " Sheet A₁ -South Atlantic
Ocean, January 1936 (with
Appendix).

" " " " Sheet B₁ -Northern Part of
North Atlantic Ocean
(in press).

70. Report of Proceedings
of Meetings of the Third
International Hydrographic
Conference.

The printed Report of Proceedings appeared in December 1932.

71. Statutes.

A pamphlet containing the amendments to Statutes introduced by the Third International Hydrographic Conference was published in 1932.

APPENDICES D & E.

Table of Tonnages, Shares, Votes and Contributions.

STATES MEMBERS of the I.N.B.	NOTIFIED TONNAGE	SHARES AND VOTES			CONTRIBUTIONS Gold frs.
		Fixed	Suppl.	Total	
ARGENTINE		2			
BRAZIL		2			
BRITISH EMPIRE..... U.K. & Australia.	18,545,179	2	14	16	32,000
CHILE		2			
CHINA		2			
DENMARK	1,108,210	2	4	6	12,000
ECUADOR	10,370	2	-	2	4,000
EGYPT	15,682	2	-	2	4,000
FRANCE		2			
JAPAN	4,748,874	2	7	9	18,000
MONACO	-	2			
NORWAY		2			
POLAND		2			
PORTUGAL	200,000	2	2	4	8,000
SIAM	31,388	2	-	2	4,000
SPAIN	1,259,221	2	4	6	12,000
SWEDEN	1,499,429	2	5	7	14,000
U.S. OF AMERICA		2			
URUGUAY		2	-	2	4,000
		38			

72. Year-Book.

The International Hydrographic Bureau Year-Book was published for 1933, 1934, 1935 and 1936 and a 1937 Supplement to this last is in course of preparation.

73. Extracts from Hydrographic Review.

A list of reprints of articles published in the Hydrographic Review was given on page 19 of the International Hydrographic Bulletin, January 1933.

74. Annual Report and Budget Estimates.

The Bureau has edited for each year the Annual Report provided for by the Statutes on the work carried out and proposed to be undertaken by the Bureau, along with budget estimates for the succeeding year.

75. Circular-Letters.

Several Circular-Letters have been incorporated in the International Hydrographic Bulletin in the form of Bulletin Circulars.

The December Bulletin for each year gives a recapitulation of the year's Circular-Letters with an index of the subjects to which they refer.

76. Corrections to Tonnage Table.
(Appendices D and E)

By Circular-Letter N°2-R/2-H of 12th March 1936, the Directing Committee requested to know the present tonnage owned by each State Member (Article 34 (b) of the Statutes).

The Table on opposite page shows the figures which have reached the Bureau and the amendments thus rendered necessary in Appendices D and E.

77. Correspondence

The following Table shows the number of letters received and despatched since the establishment of the Bureau :-

.....

YEAR	RECEIVED	DESPATCHED	TOTALS	CIRCULAR-LETTERS	
				H	R
1921	198	253	451		10
1922	782	612	1394		49
1923	1102	858	1960	27	16
1924	1255	1136	2391	44	14
1925	1366	1152	2518	28	11
1926	1374	1043	2417	40	10
1927	1868	1518	3366	45	8
1928	1903	1584	3487	16	12
1929	1711	1261	2972	7	6
1930	1512	1143	2655	11	7
1931	1450	1099	2549	7	5
1932	1314	1058	2372	7	9 Suppl.
1933	1300	918	2218	9 Suppl.	13 + 5
1934	1159	859	2018	9 + 3	3
1935	1334	996	2330	8 + 6	2
1936 {1st.Sept} 973		728	1701	4	2

Note: Acknowledgments of receipt of letters are not included in the above figures. When Circular-Letters are sent out by the Bureau, each batch of about 50 is counted as one letter only.